

California's Natural Gas Context

**Supply/Demand Outlook
and
Concerns for this Winter**

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Presentation Topics

- Background facts about natural gas in the US and California
- Why prices will be higher this winter
- Impacts of higher prices on consumers
- What's being done to cushion the impact



California's NG Outlook

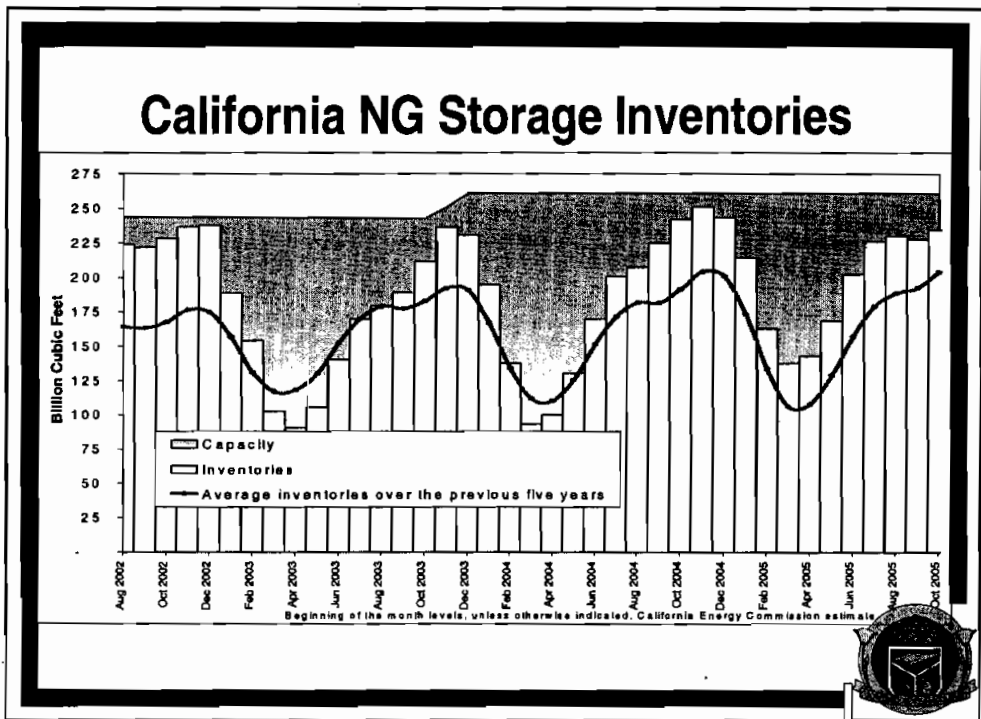
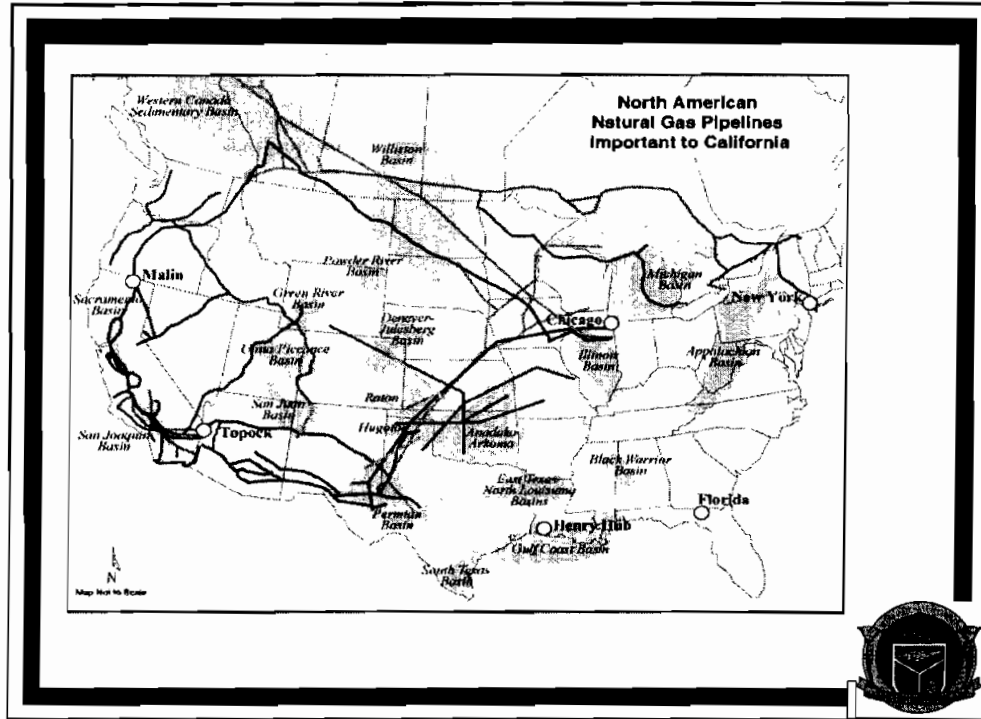
- Good news:
 - Current reliability good
 - Recent infrastructure improvements help
 - Storage inventories good
 - Higher public awareness of NG issues
 - Aggressive energy efficiency and renewable programs
 - CA NG R&D program is helping
 - NG has helped "clear the air"



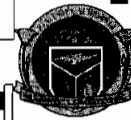
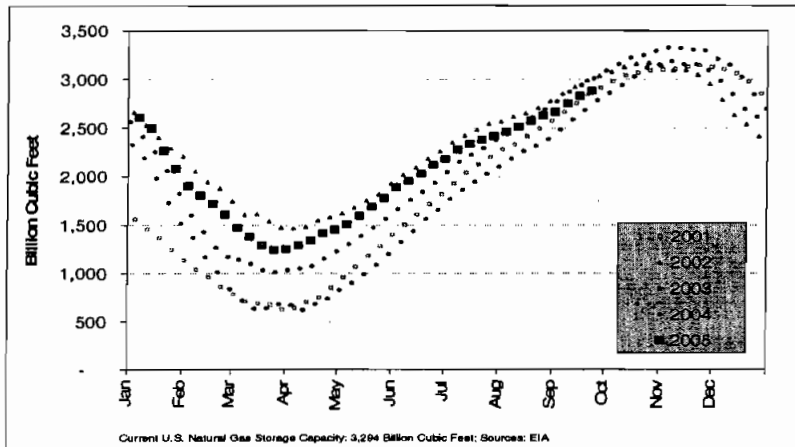
California's NG Outlook

- Bad news:
 - NG prices are much higher now
 - Prices will be even higher this winter
 - NG is the dominant fuel for power plants
 - ◆ Up to 50% of generation
 - CA imports 87% of its NG
 - CA is at the end of the pipeline
 - CA competes with other major US markets for NG
 - The US long term supply/demand balance outlook is pessimistic

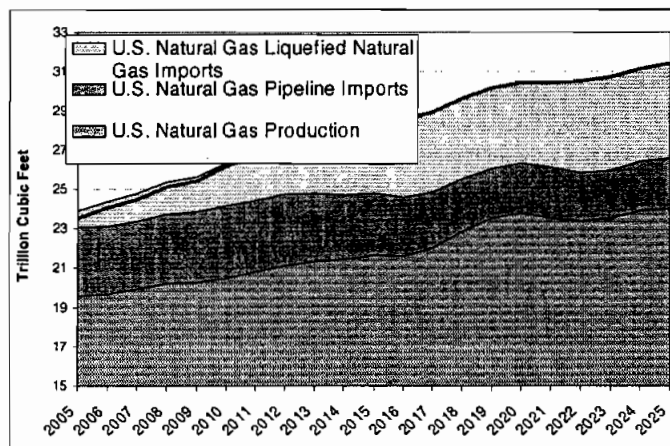




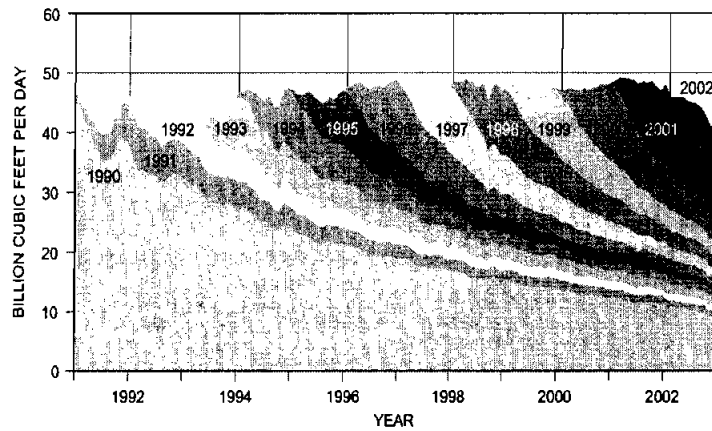
US NG Storage Inventories



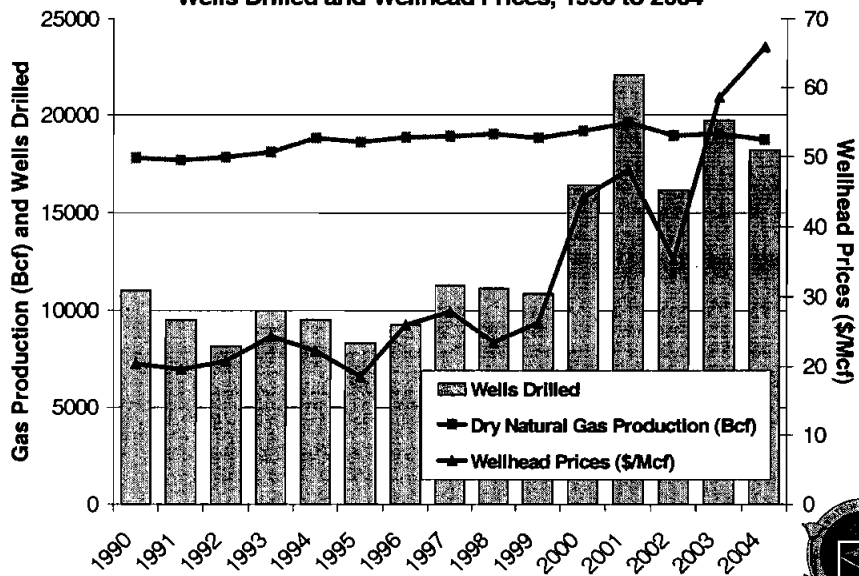
US NG Supply Forecast by US DOE/EIA



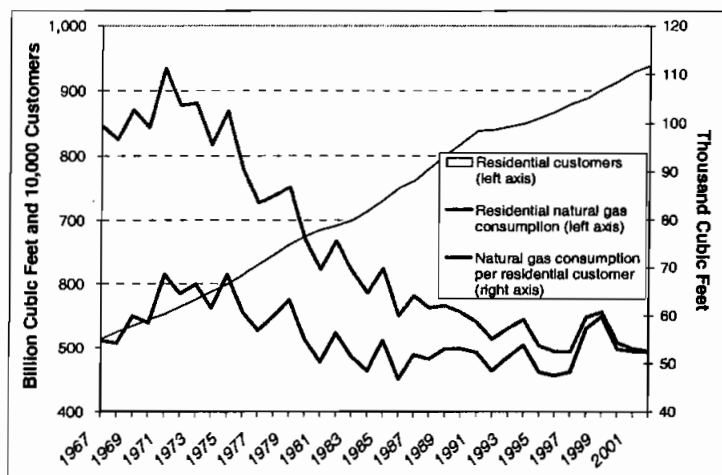
Well Depletion Rates



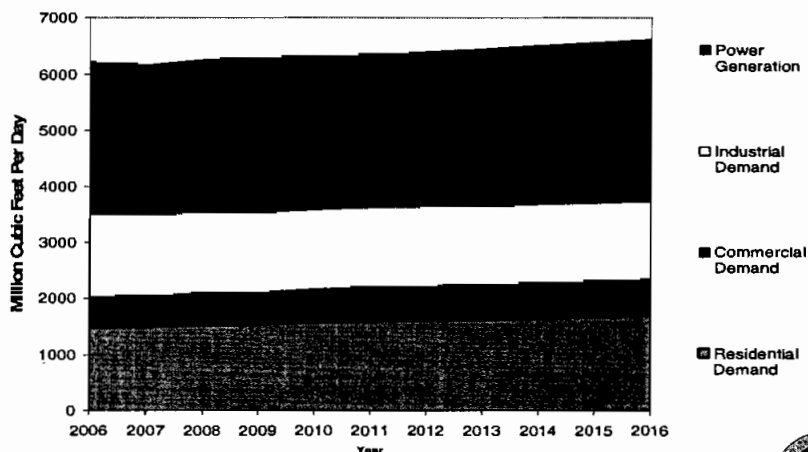
Wells Drilled and Wellhead Prices, 1990 to 2004



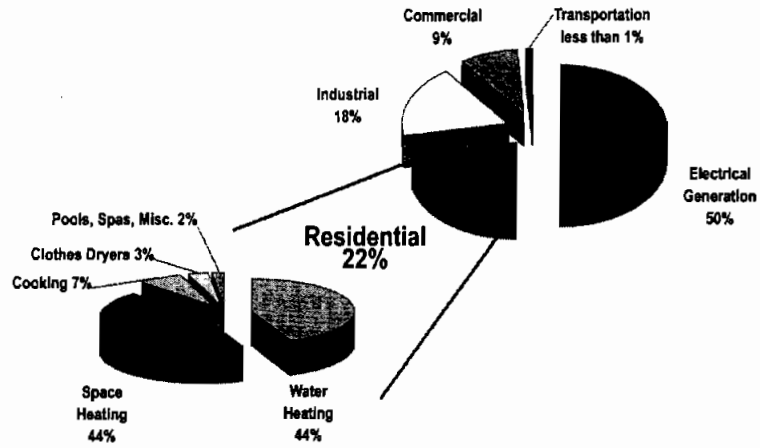
CA Efficiency Gains



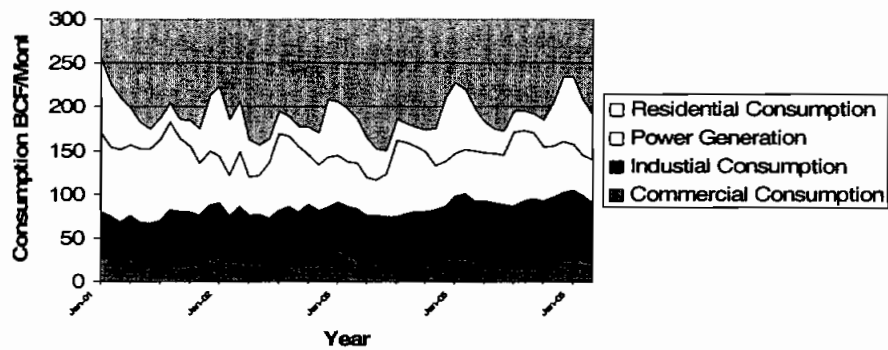
California NG Demand Projection



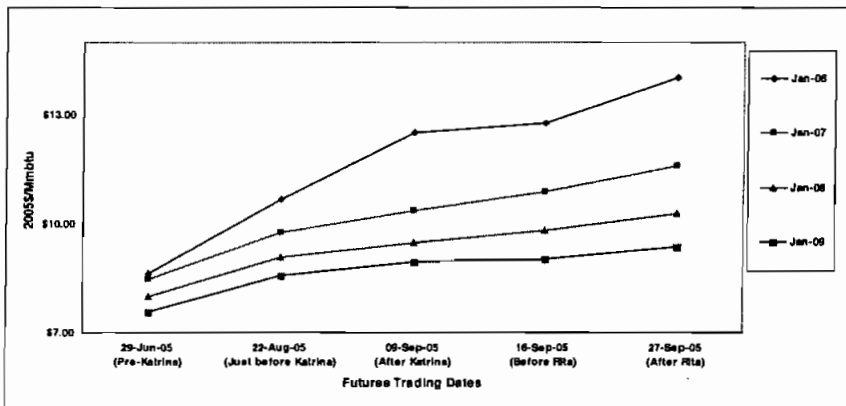
2004 Natural Gas Use in California



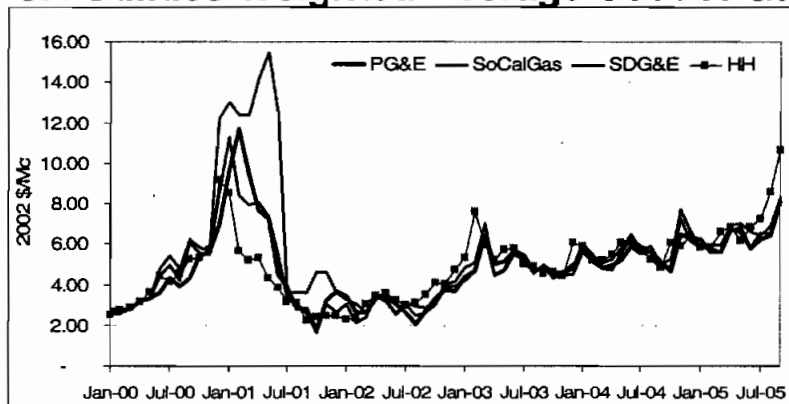
California NG Consumption



Effects of Hurricanes on Future Prices



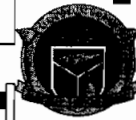
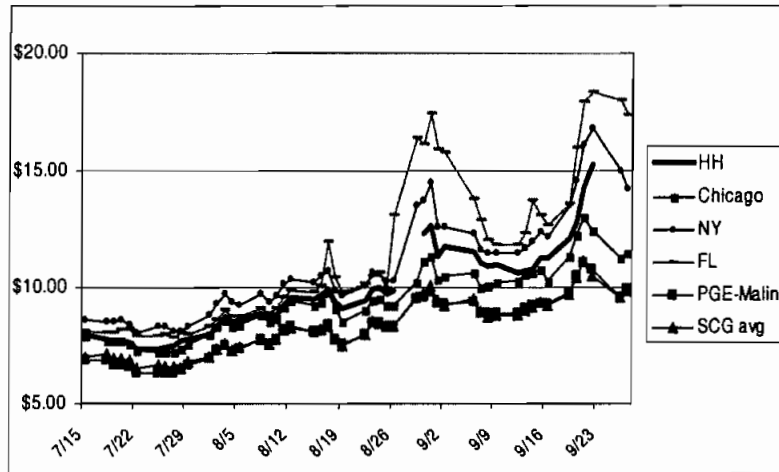
CA Utilities Weighted Average Cost of Gas



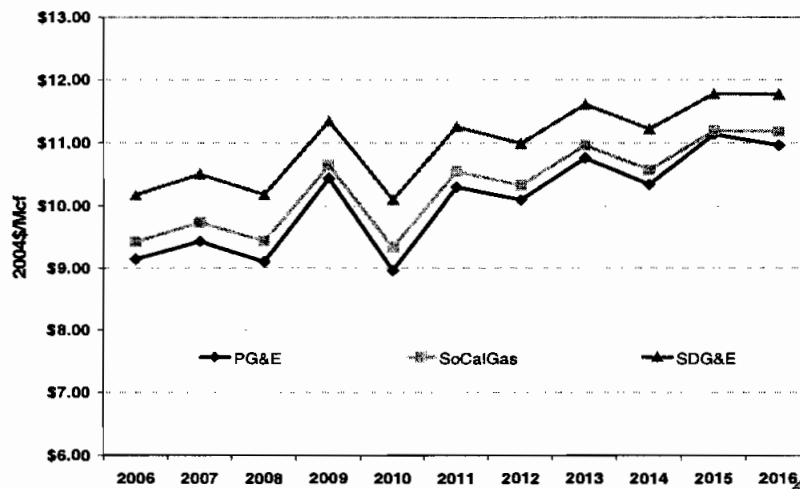
Weighted Average Cost of Gas (WACOG): the weighted average cost of gas (commodity) and interstate pipeline volumetric charges.



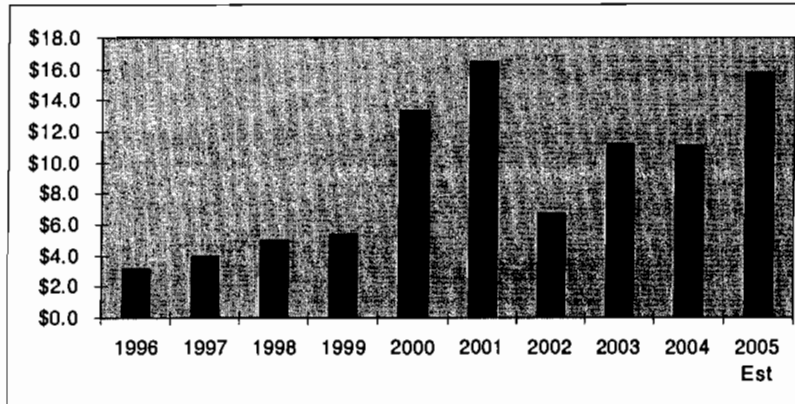
Prices Around the US



Price Projection for Residential Customers



Natural Gas Commodity Costs to California Consumers in \$Billions



CA Consumers' Cost of NG

- At \$5/mmBtu, Californian's pay about \$11 billion for just the molecules.
- At \$10/mmBtu, Californian's pay about \$22 billion for the molecules.
- Actions that result in a 10% savings will keep an extra \$1-2 billion in our state.



California's Energy Policy

- Governor's energy policy priorities 2005
 - Aug 23 response to 2003/2004 IEPR
- Energy Action Plan II
 - Loading Order
- 2005 Draft Integrated Energy Policy Report (Energy Report)



Broad Policy Priorities

- Energy efficiency—NG programs
- Energy efficiency—NG standards
- Energy efficiency—electric
- Renewable electric energy programs
- Distributed generation
- Increase fuel type diversity
- Increase fuel supply diversity
- Additional NG infrastructure



Policies on NG

- Increase energy efficiency efforts
- Diversify sources of supply
- Develop alternative supplies
 - Biogas from ag operations
 - Landfill gas
 - Instate stranded gas
- Support molecules from LNG on West Coast



What Can Residential Consumers Do?

- Turn down your thermostat to 68 degrees
- Replace or clean furnace filters once a month
- Reduce hot water temperature
- Seal up the leaks
- Consider replacing your old gas appliances with an ENERGY STAR® water heater or furnace
- For more tips check the web at
 - www.energy.ca.gov/consumerfuels/



Thank you

Questions?

